

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

Listing of the Claims:

Claims 1-10 (Cancelled)

11. (New) A system for performing vehicle crash tests, comprising:

a guide device for defining a predetermined path of a vehicle,

a speed guide device for defining a predetermined speed that the vehicle will achieve at at least one location along the predetermined path and

a driverless, multi-track vehicle comprising:

at least one drive apparatus for driving at least one wheel of the vehicle,

at least one braking apparatus for selectively braking at least two wheels disposed on different sides of the vehicle,

a guiding device for calculating a deviation between the predetermined path and an actual path of the vehicle and

a control device for controlling the operation of the vehicle such that the vehicle is movable along the predetermined path with a speed that is predetermined for a crash location,

wherein the operation of the drive apparatus and/or the braking device is/are controllable by the control device such that, when there is a deviation between the actual path and the predetermined path, the direction of the vehicle is changeable by selectively changing the torques acting on the wheels such that the deviation decreases.

12. (New) A system according to claim 11, wherein the drive apparatus and the braking apparatus are arranged and constructed to cooperate together such that the vehicle speed does not

change as a result of a braking intervention for the purpose of converging the actual path with the predetermined path.

13. (New) A system according to claim 12, wherein the control device is disposed in the vehicle and comprises a data memory, wherein values dependent on the operation of the wheel brakes are stored in the data memory for controlling an internal combustion engine of the vehicle such that a sum of the vehicle-driving moment of the internal combustion engine and the brake moment of the wheel brakes, which is applied for correcting the moving direction of the vehicle, remains approximately constant during the crash-test.

14. (New) A system according to claim 12, wherein the drive apparatus and the braking apparatus are formed by at least two selectively-controllable motors arranged and constructed drive at least one wheel disposed on each side of the vehicle and are controllable by the control device such that, when there is a deviation between the predetermined path and the actual path, the vehicle changes its direction by selectively changing the moments acting upon the wheels, whereby the deviation decreases

15. (New) A system according to claim 14, wherein a barrier, which is arranged and constructed to collide with another vehicle, is attached to said vehicle.

16. (New) A system according to claim 15, wherein the guide device comprises a navigation apparatus arranged and constructed to operate by measuring distances between the vehicle and predetermined reference locations.

17. (New) A system according to claim 16, wherein the control device is arranged and constructed to control the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression.

18. (New) A system according to claim 11, wherein a barrier, which is arranged and constructed to collide with another vehicle, is attached to said vehicle.

19. (New) A system according to claim 11, wherein the guide device comprises a navigation apparatus arranged and constructed to operate by measuring distances between the vehicle and predetermined reference locations.

20. (New) A system according to claim 11, wherein the control device is arranged and constructed to control the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression.

21. (New) A method for performing vehicle crash tests using a system that comprises:
a guide device for defining a predetermined path of a vehicle,
a speed guide device for defining a predetermined speed that the vehicle will achieve at at least one location along the predetermined path and
a driverless, multi-track vehicle comprising:
at least one drive apparatus for driving at least one wheel of the vehicle,
at least one braking apparatus for selectively braking at least two wheels disposed on different sides of the vehicle,
a guiding device for calculating a deviation between the predetermined path and an actual path of the vehicle and
a control device for controlling the operation of the vehicle such that the vehicle is movable along the predetermined path with a speed that is predetermined for a crash location,
the method comprising:
controlling the operation of the drive apparatus and/or the braking device such that, when there is a deviation between the actual path and the predetermined path, the direction of the vehicle is changed by selectively changing the torques acting on the wheels, whereby the deviation decreases.

22. (New) A method according to claim 21, wherein the drive apparatus and the braking apparatus are arranged and constructed to cooperate together such that the vehicle speed does not change as a result of a braking intervention for the purpose of converging the actual path with the predetermined path.

23. (New) A method according to claim 22, wherein the control device is disposed in the vehicle and comprises a data memory, wherein values dependent on the operation of the wheel brakes are stored in the data memory for controlling an internal combustion engine of the vehicle, the method further comprising:

maintaining a sum of the vehicle-driving moment of the internal combustion engine and the brake moment of the wheel brakes, which is applied for correcting the moving direction of the vehicle, approximately constant during the crash-test.

24. (New) A method according to claim 22, wherein the drive apparatus and the braking apparatus are formed by at least two selectively-controllable motors arranged and constructed drive at least one wheel disposed on each side of the vehicle and

the method further comprises:

controlling the motors such that, when there is a deviation between the predetermined path and the actual path, the vehicle changes its direction by selectively changing the moments acting upon the wheels, whereby the deviation decreases

25. (New) A method according to claim 24, wherein a barrier, which is arranged and constructed to collide with another vehicle, is attached to said vehicle.

26. (New) A method according to claim 25, wherein the guide device comprises a navigation apparatus arranged and constructed to operate by measuring distances between the vehicle and predetermined reference locations.

27. (New) A method according to claim 26, further comprising controlling the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression.

28. (New) A method according to claim 21, wherein a barrier, which is arranged and constructed to collide with another vehicle, is attached to said vehicle.

29. (New) A method according to claim 21, wherein the guide device comprises a navigation apparatus arranged and constructed to operate by measuring distances between the vehicle and predetermined reference locations.

30. (New) A method according to claim 21, further comprising controlling the vehicle speed such that the vehicle follows the predetermined path with a predetermined speed progression.